[redacted]

Listing of the Claims:

1. (Currently amended) A method of patterning a magnetic layer having a high coercivity for the production of a magnetic recording medium, the method comprising:

exposing a masked magnetic layer on a substrate to ions having an implantation energy of about 5 KeV to about 150 KeV to ~~change~~ lower the coercivity of the exposed magnetic layer without substantially affecting the topography of the magnetic layer to form a distribution of low coercivity regions functioning as servo-marks capable of being sensed by a read/write head.

2. (Previously presented) The method according to claim 1, comprising:

exposing the masked magnetic layer to one or more ion bombardments at a dose of about 1 x 10^{13} atoms/cm^2 to about 9 x 10^{15} atoms/cm^2.

3. (Currently amended) The method according to claim 2, comprising ~~changing~~ lowering the coercivity of the exposed magnetic layer ~~from~~ by about 500 Oe to about 5000 Oe.

4. (Previously presented) The method according to claim 1, comprising providing a unidirectional DC magnetic bias to the magnetic layer after exposing the masked magnetic layer to align the magnetization direction of each of the magnetic domains in one direction and then switching the magnetization direction of the exposed regions.

5. (Previously presented) The method according to claim 1, comprising exposing a masked magnetic layer having a coercivity from about 2000 Oe to about 15000 Oe.

6. (Previously presented) The method according to claim 1, comprising:

exposing the masked magnetic layer to one or more ions having an implantation energy of about 10 KeV to about 50 KeV.

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7. (Currently amended) The method according to claim 1, comprising exposing the masked magnetic layer to argon ions to ~~change~~ lower the coercivity of the exposed magnetic layer.

8. (Currently amended) The method according to claim 1, comprising exposing the masked magnetic layer to ions having a atomic weight of greater than about 35 to ~~change~~ lower the coercivity of the exposed magnetic layer.

9. (Previously presented) The method according to claim 1, comprising masking the magnetic layer to form a series of substantially radially extending low coercivity regions to divide the magnetic layer into a plurality of sectors comprising substantially concentric circumferentially extending data tracks.

10. (Previously presented) The method according to claim 1, comprising:

depositing a photoresist layer on the magnetic layer, exposing the deposited photoresist layer to radiation and developing the exposed photoresist to form the masked magnetic layer.

11. (Previously presented) The method according to claim 10, comprising removing the exposed photoresists after exposing the masked magnetic layer; and depositing a protective overcoat on the magnetic layer.

12. (Previously presented) The method according to claim 1, comprising:

depositing a photoresist layer on the magnetic layer, and imprinting the photoresist layer with a stamper to form topography on the photoresist to form the masked magnetic layer.

13. (Previously presented) The method according to claim 1, comprising:

depositing an underlayer on the substrate; and

depositing the magnetic layer on the underlayer.

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14. (Previously presented) The method according to claim 1, comprising:

exposing the masked magnetic layer on the substrate to one or more ion bombardments of ions at a dose of about 1×10^{10} atoms/cm^2 to about 1×10^{20} atoms/cm^2 and having an implantation energy of about 5 KeV to about 150 KeV, to provide the low coercivity region that differs from the high, unexposed regions by about 800 Oe to about 2000 Oe without substantially affecting the topography of the magnetic layer to form the distribution of low coercivity regions functioning as servo-marks capable of being sensed by a read/write head; and

providing a unidirectional DC magnetic bias to the magnetic layer to align the magnetic flux of the magnetic layer in one direction and then switching the flux direction of the exposed regions.

15. (Withdrawn) A magnetic recording medium comprising:

a magnetic layer having a substantially uniform surface containing a data zone and servo-information wherein the servo-information comprises a distribution of high coercivity regions and a distribution of low coercivity regions that are capable of being sensed to enable positioning of a read/write head in the data zone, wherein the difference between the high coercivity regions and the low coercivity regions by about 800 Oe to about 2000 Oe.

16. (Withdrawn) The magnetic recording medium according to claim 15, wherein the servo-information comprises a series of regions extending in a radial direction across the data zone to divide the data zone into a plurality of sectors.

17. (Withdrawn) The magnetic recording medium according to claim 15, wherein: the data tracks are substantially concentric extending circumferentially; and the distribution of discrete low coercivity regions denotes the beginning and the end of the magnetically recorded servo-information in a data track.

18. (Withdrawn) A magnetic recording medium comprising:

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a magnetic layer having a substantially uniform surface; and

means for providing a data zone and servo-information in the magnetic layer.